GEOGRAPHIC SCHOOL BULLETINS

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Luis Marden

SOME MAYA FINDS WERE BY-PRODUCTS OF CHEWING GUM

Hacking their way through jungles of southern Mexico and northern Guatemala, native *chicleros* search for the tall sapodilla trees yielding chicle, the gum that is the base of chewing gum. Occasionally the *chiclero* guides have led archeologists to sites which revealed much about Maya life. A site that stimulated the search is Mexico's Chichen Itzá, where these sturdy columns guard the Temple of the Warriors (Bulletin No. 4).

HOW TEACHERS MAY OBTAIN THE BULLETINS

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The Frosty Caucasus Wall, Russia's Mountain Rampart

THE Nazi drive into the U. S. S. R.'s southwest, popularly called the Caucasus, has run up against the highest mountain wall in Europe. Stretching diagonally for about 770 miles from the Black Sea to the Caspian, the Caucasus Mountains have blocked north-south traffic on the isthmus between the two seas since the beginning of history.

Not until the 19th century, when Tsarist Russia annexed to its growing empire the Transcaucasian countries south of the mountain barrier, did any nation succeed in extending its political authority from one side to the other. Empires of the ancient world, blossoming to the southwest, considered the Caucasus Mountains the outer edge of civilization, beyond which prowled the hordes of Gog and Magog and fierce one-eyed monsters.

Unmapped Until Recent Years

The mountain range comprising this natural Maginot Line is highest in the west-central part but most complex on the east. In its narrow saw-toothed western section rise at least five mountain titans higher than the highest of the more famous Alps. Elbrus (Elborus) is known as Europe's highest point (illustration, next page), but few except mountain-climbers have heard of Dykhtau and Shkara, both above 17,000 feet, or Koshtantau and Kazbek, both about 1,000 feet higher than Mont Blanc's 15,782 feet.

Such Caucasian giants, head and shoulders above their western sisters in the Alps, have been so little known that official Russian maps of 80 years ago omitted Ushba (illustration, inside cover), 900 feet taller than California's Mt. Whitney.

Higher than the Alps, the Caucasus range is also narrower and therefore steeper. It narrows to about 50 miles near the middle, where its slopes pile up majestically to towering Kazbek (16,541 feet). It frays out eastward toward the Caspian in the innumerable tangled ridges and deep glens of Daghestan ("The Mountain Country," from Turkish *dagh*, for "mountain").

The western giants are tall enough to capture from the clouds some of Europe's heaviest rainfall and heaviest snows. Their upper reaches are buried under perpetual snow, with primeval glaciers in the high valleys. The surface layer of snow frequently softens under the sun and slides hissingly downward like a billowing blanket. The glaciers filling every chink of the range's backbone inspired prehistoric mountaineers to invent iron spikes like the crampons still used by mountain climbers. By 1900 some 600 square miles of glaciers were known.

Imprisoned Curious Mountain Tribes

Their perpetual snowy coats kept scientists from realizing that some of the peaks, like Elbrus and Kazbek, are extinct volcanoes that shouldered their way into this imposing row of granite mountains.

On slopes below the snow line—about 9,000 feet in the rainy west and a half-mile higher in the dry east—begin the dense forests that have made the Caucasus famous for timber—such as Circassian walnut—for 20 centuries. On the fertile southwestern flanks in Georgia, wherever the snow melts in summer, the grassy glens are carpeted with brilliant poppies, geraniums, blue gentians, golden crocuses, and abundant rhododendrons. In sheltered glades the monkshood may lift its blue and white flowers higher than a man's head.

UMI

Vittorio Sella

ICE-ARMORED USHBA, A ONE-MOUNTAIN FORTRESS, HOLDS A LITTLE NATION IN ITS LAP

One of the lesser giants of the Caucasus, lying southeast along the crest of the range from Elbrus, Mount Ushba lifts its double peak above 15,400 feet, higher than the highest in the U. S. proper. The Chalaat Glacier is one of several which encase the mountain in heavy Ice Age armor, and give rise to icy streams that pour down its north slopes to reach the Caspian Sea, and down its southern side to the Black Sea. Since lofty Ushba and its glaciers protected them from the north, the Svan tribesmen were able to maintain an independent tribal nation in the glens of its southern flanks—boldly called Free Svanetia—and to exclude outsiders so successfully that map-makers did not know of the existence of towering Ushba until Tsarist Russia annexed Svanetia in 1876 (Bulletin No. 1).

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Commandos Raid Channel Steppingstone, Isle of Sark

IN THE recent Commando raid on the Isle of Sark, British forces crossed a mere 60 miles of English Channel, but in so doing dropped back nearly three centuries to a way of life probably unique in the British Empire.

The island constitutes a Royal Fief or Manor, held direct from the British Crown, ruled over by Mrs. Robert W. Hathaway, Dame of Sark. When islanders toast the king in their one tavern, the Mermaid, they say, "To the King, our Patron," but to them he is the Duke of Normandy.

Sark is one of the few spots untouched by modern progress. In peace times its inhabitants lead a life vastly different from that on the near-by European continent. There are no automobiles, no street lights, no sidewalks, no unemployment, no politicians, and no income tax.

More French Than English

French is the official language of Sark, but as English is also taught in the schools, the people are bilingual. Among themselves the islanders speak a language more or less their own, a survival of the ancient Norman French spoken at the time of the Conquest, which is not written, and cannot be understood by outsiders.

In the possession of the Dame of Sark is the charter given by Queen Elizabeth in 1565. Sark is not under the British Parliament, but a Parliament of its own makes its laws. The six hundred people who live there are like one large family.

This English Channel island is 22 miles off the French coast and 60 miles from England. It is over three miles long and a mile and a half wide, and is divided into two unequal parts, Great Sark and Little Sark. These are joined by a narrow isthmus, the Coupée, over 100 yards long and six feet wide along the crest, where its thread of roadway runs perilously 300 feet above the sea. The 35 miles of Sark's rough, rocky coast, backed by cliffs some of which rise 300 feet out of the sea, are perforated by smugglers' caves. Tradition says that pirates from Scotland menaced Channel shipping in these waters before the French occupied the island in the 16th century. The upland is reached from the one cliff-walled harbor through a tunnel 450 feet long. The tide sometimes drops 42 feet, leaving the harbor dry.

Old Norman Ways Prevail, Except for Fish and Grain

The shilling landing tax on 25,000 annual visitors and a small land and liquor tax normally paid for government and public works. The 40 farms provided for in the Elizabethan charter are still handed down undivided, from father to oldest son. The Seigneurie, the home of the Hathaways, the original part of which dates from 1565, is built of granite quarried on the island. The cottages of the farmers are built of the same material. Grain and vegetables are grown on Sark, and the famous Guernsey cattle, named for Sark's sister island across 6 miles of Channel, to the west, graze tethered to save pasture. The fishing fleet is motorized.

Before the German occupation, the island flew the ancient Norman flag, and many of the old customs and legends survived. Only the Seigneur, for example, may keep pigeons—a law which serves to minimize damage to crops—and only he may build a mill or grind grain. The old stone windmill is no longer used, but the farmers bring their grain to the Seigneurie where, for a small sum, it is ground by motor—one of the few concessions to modern ways. The children sing old

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Just as the peaks are loftier, so are the passes of the Caucasus higher than those of the Alps, buried in snowdrifts that could engulf a man without a trace. Three passes have borne most of the traffic since history began—the Klukhor, at 8,400 feet, where now the Sukhum Military Road winds down to the Black Sea; the Mamison, carrying the Ossetian Military Road over the range at 9,300 feet; the Darial, where the famous Georgian Military Road threads through a gorge at 8,000 feet beneath the overhanging crags of Kazbek, on the way from Ordzhonikidze to Tiflis. The historic Derbent Gateway, on the eastern edge, is a narrow corridor between the mountains of rugged Daghestan and the Caspian.

Railroads parallel the range to north and south and skirt it at either end, but no rails have yet been pushed across these high passes.

While the Caucasus Isthmus was a land route for early tribes swarming into Europe to settle or to loot, the mountains were a trap that imprisoned the laggards or the unsuccessful. Huns, Goths, Avars, and other people that no longer exist as nations have left remnant tribes in isolated glens.

Note: The Caucasus is shown on the National Geographic Society's Map of the Theater of War in Europe, Africa, and Western Asia. A price list of maps may be obtained from the Society's headquarters in Washington, D. C.

See also "Roaming Russia's Caucasus," in the *National Geographic Magazine*, July, 1942; and "Sixteen Miniature 'Nations' Crammed into Russia's Caucasus," in the GEOGRAPHIC SCHOOL BULLETINS, October 12, 1942.

Bulletin No. 1, November 2, 1942.

Sovfoto

RUSSIANS PUT A FEATHER IN THE HIGHEST HAT IN EUROPE—MOUNT ELBRUS

Europe's highest peak is the volcanic cone of Elbrus in the western section of the Caucasus Mountains—18,471 feet, more than 2,500 feet higher than Mont Blanc, the loftiest of the Alps. Natives living in its shadow call it Mingitau, "the Great White Mountain." They have the superstition that a great bird protects the peak and keeps climbers from reaching the top by attacking them with its great beak and talons. But before the war the youths of the Soviet exploded the superstition by their frequent ascents of Elbrus, on expeditions which linked sports with training in mountain warfare. They combined the pleasure of an outdoor vacation with instruction in mountaineering, with their government bearing the expense and supplying them with clothes and equipment. Here boys and girls watch a demonstration of how to come down an ice-covered cliff without injury, using ropes and spiked shoes.

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Yankee-Guarded Bahrein Islands Rich in Pearls and Petroleum

ADD Bahrein Island, one of the far-off Persian Gulf island group of that name, to the lengthening list of points on the globe where U. S. troops are stationed. American forces there help protect its oil wells, important among the petroleum fields of the Middle East.

The sun-baked Bahrein Islands lie off the coast of Arabia in the shallow Persian Gulf. Their latitude is about the same as that of Miami, Florida.

Classed as an independent state under the 160-year-old rule of the Sheikhs Al Khalifah, the islands have been under British protection since 1875. For centuries they have been the headquarters of productive pearl fisheries. In the past decade they have risen to real importance as a source of petroleum.

U. S. Engineers Produce Bahrein's Oil

Lying in the oil-rich Middle East, Bahrein Island had been known for many years to have oil deposits, when Americans took over in 1932. By 1938 American engineers and capital had made Bahrein fourteenth among the world's oil-producing regions. Production has amounted to seven to eight million barrels a year. In the meantime, American genius has tackled near-by sands of Arabia at Dammam, and created a six-million-barrel annual oil output for the desert kingdom of Saudi Arabia.

Thus the United States shares in guarding and producing the Middle East's abundant oil, which, with Russia's vast resources, still remains outside Axis hands. It normally totals well over a hundred million barrels a year. Italian fliers bombed Bahrein oil installations as early as 1940.

Six-Million-Dollar Pearl Industry

Bahrein Island, greatly overshadowing the other islets of the small Bahrein cluster, measures 26 miles north to south and is 10 miles wide. The petroleum wells and refinery are near the center, where there are hills 400 feet high. Along the north coast is a small fertile area where herds graze and figs, dates, wheat, and barley grow.

At Manama, on the northeast coast, the sheikh's palace overlooks the island's port town of 35,000 people. This was one of the first towns on the Persian Gulf to have electricity. Northward is the harbor, lying between protecting reefs. In recent years a causeway has been built from Manama to the town of Muharraq on Muharraq Island, because the latter was chosen as the site for a commercial airline port. In the sheltered water east of Manama and south of Muharraq is a British naval anchorage.

The approach to Bahrein is made hazardous from May to September by hundreds of pearling dhows, the slender, lateen-sailed boats that ply to and from the Great Pearl Banks 40 miles off the northern shore. On these banks native divers (illustration, next page) use weights to descend to depths often more than a hundred feet to gather pearl oysters. White, black, purple, blue, brown, and yellow pearls are found in these waters. Pearl craftsmen—drillers and polishers—operate in Manama. A normal year's pearl production exceeds $6,000,000 in value.

Pearl-fishing also helped to bring peace to the Bahrein Islands. More than a century ago, many of the Arab chieftains living on the Persian Gulf coast derived their chief income from piracy, slave-trading, and looting. Their perpetual raids

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French songs and play the ancient games, and the grown-ups continue the dances of past centuries.

Sark was the first part of the British Empire to adopt compulsory education, and its school house is also used as the meeting place of Parliament.

There is a bank which, in times of peace, was open one day a week. The jail was seldom used. The inhabitants, generally law-abiding, preferred to settle their differences out of court.

Sea Gulls Are Protected as Protection to Fishermen

Every man above the age of 16 must give two days' labor each year toward the repair of the roads, or pay for a substitute. Owners of horses and carts must contribute their use for two days, for the public welfare. The two principal occupations of the islanders, farming and fishing, are about equally divided, and in normal times everyone is able to make a living.

There is a closed season for birds, but the more fortunate sea gulls are protected by law at all times. There is a penalty for killing them, for during fogs they fly around rocks and by their raucous shrieks warn fishermen of danger.

Note: Sark is shown on the National Geographic Society's Map of the British Isles, and also on the Map of Central Europe and the Mediterranean.

For further information on Sark, see "The Feudal Isle of Sark," in the *National Geographic Magazine*, July, 1932.

See also "Sark, the Last Purely Feudal State in the World," in the GEOGRAPHIC SCHOOL BULLETINS, November 30, 1936.

Bulletin No. 2, November 2, 1942.

Photochrom Co.

CHANNEL WAVES, GNAWING SARK AWAY, CREATED "THE ALTARS"

The coast of Sark, famous for its picturesque cliffs and caves, has few spots more spectacular than "Les Autelets." These "altars" were hewn from the rocky northwest coast by centuries of lashing waves which storms sometimes hurl 100 feet high. They rise sheer from the unusually clear water, south of the red cliffs of Saignée Bay, and form weird outposts appropriate for an island that has for hundreds of years sheltered pirates, poets, and political exiles. Just around the corner from these towering rocks is the cave which perpetuates Victor Hugo's name on the little island. Old traditions die hard in the Channel Islands—a woman on Guernsey was tried for witchcraft as recently as 1914.

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From Aztec to Army Ration: Chewing Gum's Progress

WHAT! No chewing gum? The average civilian shows surprise on learning that one of the most exclusively American aspects of the American scene is fading. American-invented, American-grown, American-made, American-sponsored throughout the Old World, chewing gum used to be American-consumed as well, at the yearly rate of 104 sticks for every inhabitant of the United States.

Some would-be chewers, shopping in vain for a trimly wrapped pack, may know that chewing gum is made of chicle, a tree gum that comes from near-by Central America. Why does war blast so much of it away?

Jelutong Is Chicle's Silent Partner

The truth is that the peaceful, neatly uniformed stick of chewing gum has been drafted into the Army. Three sticks a day go to the soldier with Combat Ration K, the easily carried one-day unit of fighting food, with separate packages for breakfast, dinner, and supper. After five weeks of Ration K, he has received as much gum as the average citizen chews—in average times—a year. The rations a parachute trooper brings down with him from the skies also include chewing gum. When the boys are battling in the backwoods, with nowhere near to spend a nickel, the Army regularly issues them chewing gum along with chow.

Gum also serves on the home front, bolstering workers in defense plants. In England's war industries it has been observed that chewing gum, as an outlet for nervous energy, reduces by 10 per cent the worker's random, fidgety movements. On front line and assembly line, gum serves to kill thirst without water.

While gunner and gunsmith, pilot and plane-maker boost the demand, the supply of ingredients dwindles. About 70 per cent of a stick of gum is glucose or sugar, the first food to be scarce enough for rationing.

But war's great threat to the "chew" in chewing gum is a shortage of gum. As chicle comes to the United States mostly by water from neighboring American countries, the supply of it drops when ships must give less space to it and more to ores and fibers. Chicle, however, is usually paired in almost equal quantities in a chewing gum stick—about 14 per cent of each—with a less expensive Old World gum that is kin to rubber—jelutong. Its price averages half that of chicle. Pontianak is another name for rubbery jelutong, derived from the port of Borneo which ships so much of it. Now, however, it is reported missing in action, a casualty of the Japanese capture of Singapore.

Santa Anna Introduced Old Maya Custom into U. S.

Most jelutong grows in the Netherlands East Indies, though the highest quality comes from British Malaya. Because Singapore was the refining center, 75 per cent of it was shipped from there (12 million of the 16 million pounds imported in 1940), at 15¢ a pound. The United States has previously counted on about 95 per cent of each year's supply of jelutong. Since Japanese capture of these countries, the chicle-jelutong combinations must use less jelutong and more chicle, thereby cutting down the number of sticks the available chicle can produce.

Chewy chicle is the American gum that built the chewing gum industry, an elastic substance obtained from the *chico zapote,* or sapodilla tree, that flourishes deep in jungles of Mexico's Yucatan Peninsula and farther south in near-by Central American forests (illustration, next page). Three-fourths of the 12 million

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on one another during the summer months—the pearl-fishing season—brought many interruptions to this important occupation, and in consequence the entire area grew poorer as fewer pearls were found and sold. The British induced the chieftains to sign a truce in 1835, pledging them to refrain from any raids by sea during the fishing season but to confine their forays to land expeditions. The prosperity that followed this protection of the pearl divers led the chieftains to accept a year-round truce in 1843.

The Bahrein Islands, where practically all the inhabitants are Mohammedans, once made an effort to rival Mecca as a center of pilgrimage for the Moslem world. The 10th-century chieftain, Abu Tahir, member of a rival sect that fought the orthodox followers of Mohammed, raided Mecca and carried away to his walled city on Bahrein Island the sacred black stone from the Kaaba. This precious relic, revered by all Mohammedans and the climax of their ritual pilgrimages to Mecca, was expected to attract pilgrims instead to Abu Tahir's island stronghold. For 22 years, according to old documents, it remained in Abu Tahir's hands, in spite of protests from Egypt, Iraq, and other horrified portions of the Moslem world. As pilgrims with their profitable trade did not flock to the Bahrein Islands in its wake, the disappointed chieftain finally returned the stone to Mecca, where it is now enshrined, with the understanding that pilgrims should pay him a tax as a sort of ransom for their sacred relic.

Note: The Bahrein Islands may be found on the National Geographic Society's Map of the Theater of War in Europe, Africa, and Western Asia.

For further information, see "The Bahrein Islands Pour Forth Oil As Well As Pearls," in the GEOGRAPHIC SCHOOL BULLETINS, March 16, 1936.

Bulletin No. 3, November 2, 1942.

Platé, Ltd.

ARAB PEARL-DIVERS WEAR OBVIOUS CLOTHESPINS BUT FEW CLOTHES

What the well-dressed pearl-diver wears underwater consists mainly of a clamp that closes his nostrils to water during the dive. Sometimes he protects his ears also with plugs of beeswax. With this simple equipment, he can remain under water for 60 or 70 seconds regularly, and as long as two minutes if necessary. Bahrein regulations made 20 years ago prohibit the use of any modern diving suits and helmets that might give someone an advantage over the clothespin divers. Arab divers operate also in the pearl-fisheries of Ceylon, where this photograph was made. The diver on the right has a text from the Koran tied to his right arm as a protection against sharks.

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Geo-Graphic Brevities

BOMBED LILLE, FRENCH TEXTILE CITY, WAS SAFE IN LAST WAR

WHEN U. S. Flying Fortresses flew from British bases to prove their mettle in a pioneer daylight raid, their target was Lille, leading city of France's industrial northeast. Ten miles from Belgium, in the Flanders district, this old textile center, formerly spelled Lisle, long ago gave its name to the thread of stockings which many American women are substituting for vanishing silk.

Lille is hub of a wheel of railways. Two branches extend east to Brussels and Ghent in Belgium; others, north to Calais and Dunkirk on the English Channel, south to Arras, Amiens, and St. Quentin, and west to Bethune. It is center of a group of towns where thousands work in textile mills in the whir of spindles and banging of looms. Lille's peacetime population was over 200,000—comparable to Dayton, Ohio, or Syracuse, New York. More cotton and woolen mills are found in this vicinity than anywhere else in France. Several factors contribute to this concentration: a favorably damp climate, many skilled workers, and coal mined near by (accounting for more than two-thirds of France's output). Lille is provincial capital of the Nord (North) Department, where mines and mills cause a high population density—in normal times over 900 people per square mile.

In World War I, Lille was in German hands from October, 1914, until October, 1918. Since the Allies did not shell Lille and its valuable plants during German occupation, "leave to Lille" was much in demand among German officers.

* * * * *

TRONDHEIM, NORWAY'S WESTMINSTER

ONE of Norway's cities to suffer most heavily under the iron regulations of the emergency recently declared by German forces, as penalty for sabotage, was Trondheim, an old center of the Norwegian nation's traditions.

The city was established by the first Christian king of Norway. According to the Constitution, the rulers of Norway must be crowned in Trondheim's Cathedral (illustration, next page).

Once the capital of the country, Trondheim is today the third largest city. It ranks after Oslo and Bergen, with normally about 57,000 inhabitants. Located on the southern shore of the fjord that cuts deeply into the narrow central portion of Norway, Trondheim is only about 50 miles from the Swedish border.

In peacetime, it is a busy industrial and shipping town, linked by rail and road with other leading Scandinavian cities.

* * * * *

BOMBS MAY DISTURB STRANGE PARSI FUNERAL RITES

PARSIS of India fear any bombing of Bombay, where most of the sect live, for an unusual reason—because it might frighten the big but timid vultures that play an important role in the Parsis' disposal of their dead. Parsis expose their dead to the vultures in round roofless Towers of Silence, which are made beautiful outside by flower gardens, shrubs, and stately cypresses. This, they explain, is to avoid defiling fire, earth, or water.

The 150,000 Parsis (Parsees) are a comparatively small but prosperous and progressive sect of India. They are among the best educated people in Asia, active

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pounds for the U. S. in 1940 came from Mexico; 1,646,000 pounds from British Honduras; 1,436,000 from Guatemala. A pound makes about 380 sticks of gum.

The Aztec and the Maya chewed the sapodilla's gum, to which explorers attributed their excellent teeth. The Mexican who made the U. S. remember the Alamo is now remembered for giving this country chewing gum. Mexico's revolutionary dictator, Santa Anna, while in exile on Staten Island around 1855, was found by a Jersey City visitor, Thomas Adams, vigorously chewing a gum. Hoping to find a substitute for rubber, Adams tried to vulcanize some of the gum, with the intention of making dental plates for false teeth. But instead, chicle, now recommended by dentists, entered American mouths by way of a Jersey City confectionery store, as a chewing gum flavored with licorice.

Now 26 manufacturers in the U. S. make yearly some $65,000,000 worth of chewing gum, four companies doing 90 per cent of the business. Peppermint and spearmint are the favored flavors, with licorice, wintergreen, cinnamon, and fruit flavors for variety. The gum is usually made in air-conditioned plants, where both chicle and jelutong are cleaned, filtered, sterilized, and finally mixed, in 250-degree revolving ovens resembling cement mixers, with other ingredients—sugar (some as glucose), caramel paste, and peppermint oil or other flavoring.

Note: The countries producing chicle may be found on the National Geographic Society's Map of Mexico, Central America, and the West Indies.

Bulletin No. 4, November 2, 1942.

The Carnegie Institution of Washington

CHICLE GOES BY MULE, AIR, AND SEA, FROM JUNGLE TO JAW

This camp in northern Guatemala is a point to which the *chicleros* (chicle hunters) bring their canvas bags of gum fresh from the *chico zapote* or sapodilla tree. This stately tree grows only in the dense jungle, so *chicleros* leave their homes and spend the hunting season in such jungle camps of palm-leaf-thatched shelters. In sizable 15- or 18-gallon kettles the chicle is slowly boiled and stirred for several hours, until it is thick. The doughy white mass is poured in moulds of wood to make brick-size blocks and then wrapped in bales weighing from 100 to 150 pounds (right foreground). Ten pounds will make nearly 4000 sticks of gum. Patient donkeys wait to carry the bales to Paso Caballes, where an airplane will speed them over the jungle to Puerto Barrios, Guatemala's official port for chicle shipment. The chief U. S. imports are received at New York and Chicago, centers for chewing-gum manufacture.

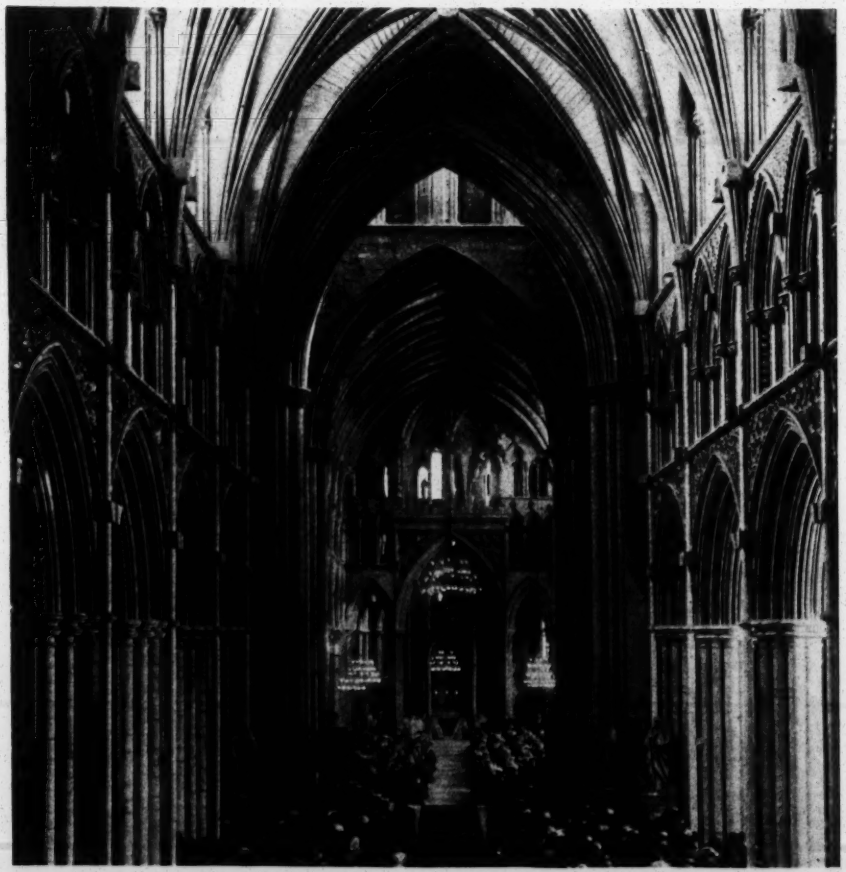
in development of air service and water power, and operating most of Bombay's cotton mills. They include some of India's wealthiest men. Parsis have built bridges and reservoirs, and have founded hospitals, colleges, and schools.

British manners and customs have been adopted by the sect, more than by many other Indians. When Parsis speak of "going home" they refer to England. In London they support a temple at Golders Green.

They are Zoroastrians, whose religion originated in Persia. After the Arab conquest in the 8th century, many fled into India from Mohammedan conquerors.

In their calendar, each day is dedicated to a guardian angel. They are often erroneously called fire worshippers because, when in prayer, they stand facing fire or the sun as symbols of their god. The Avesta, the Parsi Bible, is widely read, for 78 per cent of Parsi women and 85 per cent of the men are literate.

Bulletin No. 5, November 2, 1942.



P. O. Bugge

TRONDHEIM'S LUTHERAN CATHEDRAL IS WORLD'S NORTHERNMOST

At Trondheim (then called Nidaros), just three degrees south of the Arctic Circle, Norway's earliest Christians built the country's first Christian church. At the death in 1030 of King Olaf Haraldsson, now revered as St. Olaf, a simple wooden church was erected over his burial place, which was later replaced by the Cathedral. Fire, war, and storm have so battered the ancient structure that now most of it has been rebuilt. Haakon VII, Norway's refugee king, was crowned there in 1906. The official religion of Norway is Evangelical Lutheran. The king is head of the church, as in England, and all higher government officials must be members, as well as superintendents and principals of schools.

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